



California Environmental Protection Agency



Air Resources Board

California Renewable Electricity Standard

**Public Workshop
October 30, 2009**

Purpose of Today's Workshop

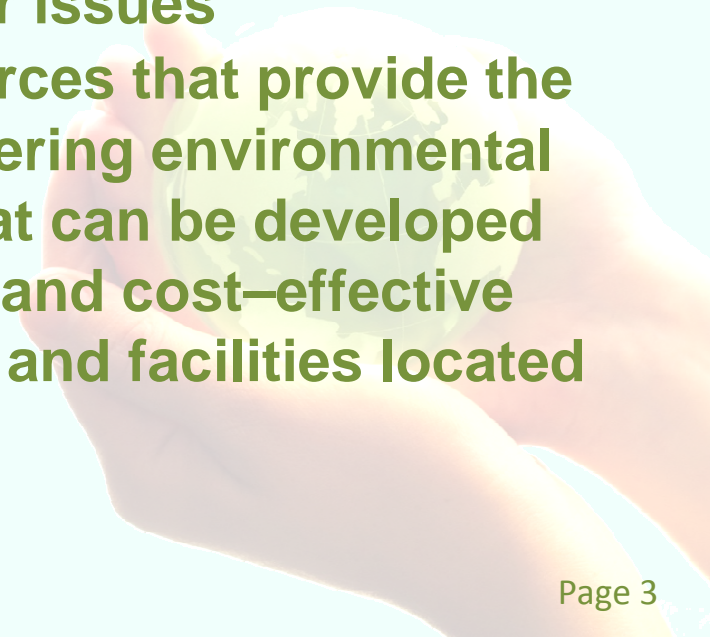
- Introduce ARB staff working on the RES
- Outline the ARB's informal and formal process for developing the RES
 - Open and informal process
 - Encourage individual and stakeholder meetings
 - Frequent public workshops
 - All workshop comments posted on website
 - Formal process beginning with release of final staff proposal – June 2010
- Present concept paper
- Answer general questions



Background

Executive Order S-21-09 – September 15, 2009

- **ARB to adopt regulation consistent with 33% energy target established in EO S-14-08**
- **Use AB 32 authority**
- **Work with the CEC and PUC to build upon the existing RPS**
- **Regulate all California load serving entities**
- **Consult with CAISO, and other balancing authorities, on reliability and integration, among other issues**
- **Establish the highest priority for resources that provide the greatest environmental benefit considering environmental costs and impacts on public health that can be developed quickly and support reliable, efficient, and cost-effective system operation including resources and facilities located through the Western Interconnection**



Agenda

- **Regulation Development Process**
- **Regulation Development Schedule**
- **Legal Authority**
- **Interagency Collaboration**
- **Proposed RES Regulatory Concepts**
- **Coordination with Existing RPS Program**
- **Public Outreach Efforts**
- **Next Steps**



Regulation Development Process (1 of 5)

Open Public Process

- **A list serve available for email notification of upcoming meetings and document releases**
- **Documents and public workshop information posted on the RES website**
- **Interested parties invited to provide comments either written or verbally**
- **Public workshops held every 6 to 8 weeks**
- **Staff available for meetings to discuss the RES**



Regulation Development Process (2 of 5)

Specific Statutory Requirements

- **ARB must address specific criteria and requirements listed in AB 32 (Health and Safety Code section 38500 et seq.)**
- **ARB must follow Administrative Procedure Act, or APA (Government Code section 11340 et seq.)**
- **These specific requirements are presented in Part 1 of the Concept Paper**



Regulation Development Process (3 of 5)

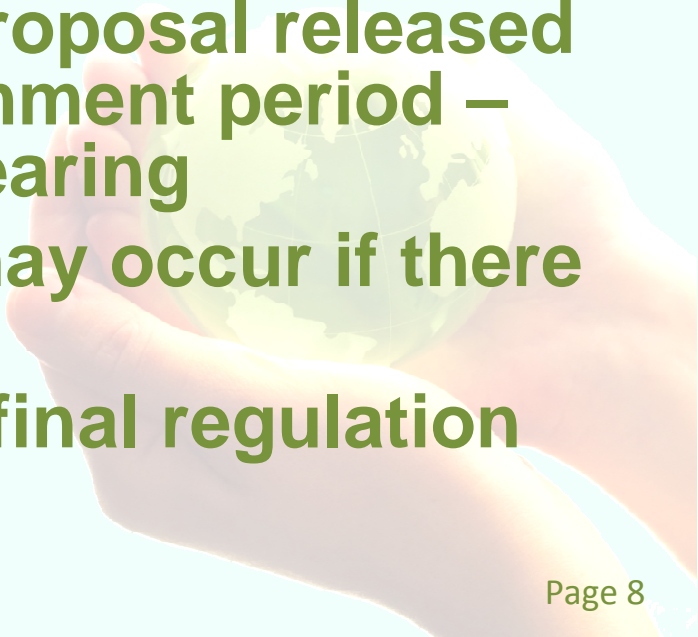
Formal 45-Day Public Comment Period

- **Notice of proposed rulemaking**
- **Proposed regulation**
- **Initial Statement of Reasons (ISOR or Staff Report)**



Regulation Development Process (4 of 5)

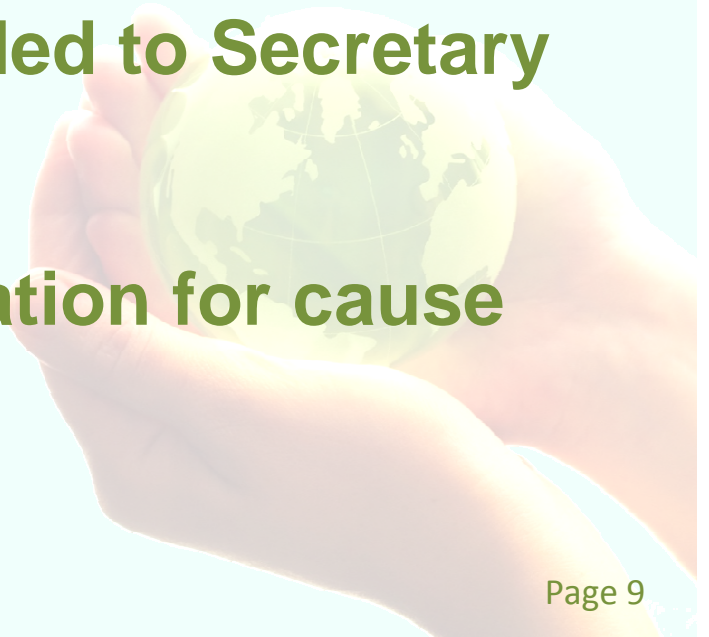
Air Resources Board Public Hearing

- **Board considers staff proposal at a public hearing (July 2009)**
 - **Board can:**
 - **Approve the staff proposal**
 - **Approve the staff proposal with specific amendments**
 - **Direct the staff to return to the Board at a later date**
 - **Any amendments to original proposal released for at least a 15-day public comment period – usually a month or two after hearing**
 - **Additional comment periods may occur if there are additional changes**
 - **Executive Officer then adopts final regulation**
- 
- A faint, artistic image of a hand holding a small globe is visible in the bottom right corner of the slide, partially overlapping the text.

Regulation Development Process (5 of 5)

Final Regulatory Requirements

- **Staff respond to public comments (final statement of reasons – FSOR)**
- **Submit FSOR to Office of Administrative Law (OAL) for 30-day review**
- **If approved, regulation forwarded to Secretary of State for filing**
- **OAL can disapprove the regulation for cause**



Questions / Comments

Email address: auditorium@calepa.ca.gov



Regulation Development Schedule

- **October 2009 – draft regulatory concepts**
- **November 2009 – draft approach for technical analysis, and economic and environmental impact analyses**
- **December 2009 – draft regulatory language and preliminary technical analysis**
- **January 2010 – draft economic and environmental impacts analyses, and operational reliability modeling**
- **February 2010 – release revised draft regulatory language and staff report**
- **March 2010 – initiate peer review of draft proposal**
- **June 7, 2010 – proposed regulation and staff report**
- **July 22-23, 2010 – ARB Board Hearing**



Legal Authority

AB 32 provides ARB with broad authority to control GHG emissions including GHG emissions associated with the electricity sector



Interagency Collaboration

- **ARB must work closely with the energy agencies**
 - **California Energy Commission**
 - **California Independent System Operator**
 - **California Public Utilities Commission**
- **ARB must also work with other state and federal agencies**



Questions / Comments

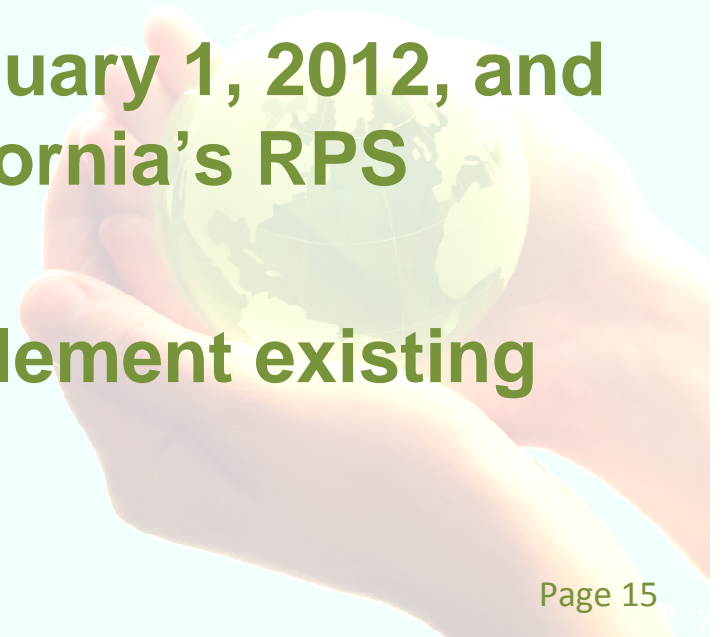
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Proposed RES Regulatory Concepts (1 of 5)

Applicability of the RES

- **RES shall apply to California electrical corporations, electricity service providers, community choice aggregators, electrical cooperatives, & local publicly owned electric utilities**
- **RES would be effective by January 1, 2012, and operate independently of California's RPS program**
- **RES will build upon and complement existing RPS program**



Proposed RES Regulatory Concepts (2 of 5)

RES Eligible Resources

- **Eligible renewable resources include:**
 - ▶ Incremental hydroelectric generation from efficiency improvements
 - ▶ Fuel cells using renewable fuels
 - ▶ Conduit hydroelectricity
 - ▶ Municipal solid waste
 - ▶ Small hydroelectric
 - ▶ Solar photovoltaic
 - ▶ Ocean thermal
 - ▶ Solar thermal
 - ▶ Tidal current
 - ▶ Digester gas
 - ▶ Ocean wave
 - ▶ Geothermal
 - ▶ Landfill gas
 - ▶ Biodiesel
 - ▶ Biomass
 - ▶ Wind
- **Staff may evaluate other technologies and current limitations on RPS eligible resources**



Proposed RES Regulatory (3 of 5)

RES Compliance Approach

- **Based on verification of load served**
- **Basic measurement unit is MWh of electricity**
- **Potential MWh conversion to a GHG metric**
- **May create RES “compliance credits” based on “RECs”**
- **Credits may be traded or used for future compliance**
- **Annual or periodic compliance targets**



Proposed RES Regulatory Concepts (4 of 5)

Monitoring and Verification

- **Regulated Parties**
- **Agency Administration**
- **RES Implementation Guidelines**
- **Potential Roles**



Proposed RES Regulatory Concepts (5 of 5)

Compliance and Enforcement

- **Compliance Requirements**
- **Compliance Determinations**
- **Enforcement Approach**
- **Potential penalties for Non-Compliance**
- **RES procurement planning**

Periodic Review

- **ARB would conduct periodic reviews in consultation with the energy agencies**



Questions / Comments

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Public Outreach Efforts

- Public workshops will be held every 6-8 weeks
- All public workshops noticed on website, with list serve notice:

<http://www.arb.ca.gov/energy/res/res.htm>

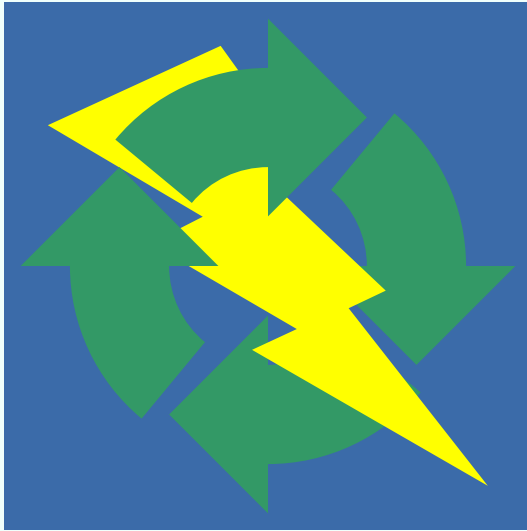
- ARB hold meetings with stakeholders
- All interested parties are invited to comment
- Written comments will be posted on-line
- Join the list serve at:
http://www.arb.ca.gov/listserv/listserv_ind.php?listname=res



Next Steps

- **Concept Outline comments due to ARB by November 20, 2009; note concept paper will not be revised and released.**
- **Staff to review comments and continue development of draft regulation**
- **Prepare and release approaches to technical analysis, economic, and environmental analyses**
- **Continue to meet with stakeholders**





Comments and Questions

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